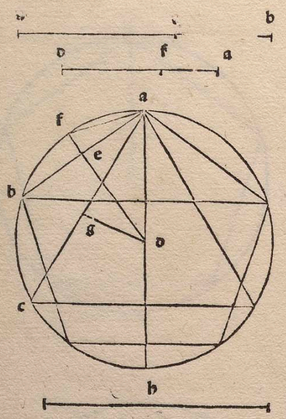


diuise ꝑm ꝓportiõem hñtem mediũ duoq; extrema erit linea.d.e.diuisa ī.f.quēad modũ ꝓponit. Nũc igit demõstrationi eiꝰ qd ꝓpositũ ē insistamꝰ. Ad cuiꝰ exēplũ sit a.b.c.circulꝰ cuiꝰ centr.d.circũscribēs pentagonũ duodecedri ⁊ trigonũ ycocedri q̃ ambo piter eadē spera circũscribit ⁊ ꝓcludit. nã ex.5.hujꝰ manifestũ ē q̃ idē circulꝰ huius pentagonũ ⁊ illiꝰ trigonũ circũscribit. sit aũt linea.a.b.latus pentagoni ⁊ linea.a.c.trigoni. sitq; linea.b.tanq̃; latus cubi ab eadē spera circũscripti: dico ita/q̃ q̃ ꝓportio omniũ supficiez duodecedri piter acceptaz ad oēs supficies ycocedri piter acceptas ē sicut linea.b.ad lineã.a.c. ꝓducat quidē a centro.d.ꝑpendicularis ad.a.b.que transeat vsq; ad circũferentiã secans.a.b.in puncto.c.⁊ arcũ eiꝰ i puncto.f.hanc autē ꝑpendicularē ꝓstat diuidere ꝑ equalia tã lineã.a.b. q̃; eius arcum chordã quidē.a.b.ꝑ scōam ptē tertie tertij: arcũ vero eiꝰ ꝑ quartã ꝑmi ⁊.27.tertij.ē igit arcus.f.a decima ps circũferentie.subtendat itaq; sibi chorda.a.f.q̃ erit latus decagoni equilateri eiusdē circuli.erit igit ex.9.tredecimi linea constans ex.d.f.f.a diuisa ꝑm ꝓportionē habentē mediũ duoq; extrema.⁊ maior portio eius erit linea d.f. At vero ex prima huius.d.c.ē equalis dimidio.d.f.dimidioq; f.a.i longũ di/rectũq; cõiunctis. Sit igit.d.g.ꝑpendicularis ad.a.c.eritq; ex corolario.8. tredecimi.g.d.tanq̃; dimidiũ.d.f.itaq; si a linea.d.c.q̃ est tanq̃; dimidiũ.d.f.a.cũ.d.f ⁊.f.a.sit linea vna: detrahatq; eq̃lis.d.g.q̃ ē tanq̃; dimidiũ.d.f.erit ꝑ illud qd ante hoc ꝓbatũ ē linea.d.c.diuisa ꝑm ꝓportionē habentē mediũ duoq; extrema et maior portio erit tanq̃;.g.d.ex demõstratione aũt.17.tredecimi cõstat q̃ si linea b.q̃ ē latus cubi diuidatq; ꝑm ꝓportionē habētē mediũ duoq; extrema maior portio eius erit tanq̃;.a.b.q̃ ē latus pentagoni figure.12.basiũ. itaq; per scōam hujꝰ ꝓportio.b.ad.a.b.est sicut.d.c.ad.g.d.quare ꝑ primã ptē.15.sextiꝰ qd ꝓuenit ex b.in.g.d.equũ ē ei qd fit ex.a.b.in.d.c. Ex corolario aũt premisse manifestum est q̃ ꝓportio omniũ supficiez duodecedri cuius latus.a.b.piter acceptaz ad oēs supficies ycocedri cuius latus.a.c.pariter acceptas ē sicut eius qd fit ex.a.b.in.d.c ad illud qd fit ex.a.c.in.g.d.igit ex prima pte.7.quinti ⁊.11.eiusdē ꝓportio eiꝰ qd ꝓuenit ex.b.in.g.d.ad illud qd ꝓuenit ex.a.c.in.g.d.ē sicut omniũ superficierũ illiꝰ duodecedri ad oēs huius ycocedri. At vero eius qd ꝓuenit ex.b.in.g.d.ad illd qd ꝓuenit ex.a.c.in.g.d.ē ꝑ primam sexti sicut.b.ad.a.c.itaq; ꝑ.11.quinti ꝓportio omniũ supficiez illius duodecedri ad oēs huius ycocedri ē sicut .b.ad.a.c. quod ē ꝓpositũ. hoc ipsũ aliter probare poterimꝰ.si ad ipsũ huius antecedens necessarium ꝑmiserimꝰ quod est. ¶ Si circulo cuilibet pentagonus equilaterus inscribatur rectangulũ q̃ sub dodrante diametri ipsius circuli et sub dextante ipsius linee angulũ ipsius pentagoni subtendentis continetur eidē pentagono equũ eē ex necessitate oportet. ¶ Maiores, nostri vnũqdq; integr in. 12.ptes eq̃les intellectu ⁊ rõne diuiserũt oēsq; eas sil. hoc ē ipm totũ assem: vocauerunt vndecim vero eaz dixerũt deuncē. decē aũt dextantes. nouē dodrantē. octo vero bisse. at septũcē septãtē vel quicũcē. sex aũt semis: quiq; quiquincē. q̃tuor trientē. tres aũt q̃drãtē. duas vero sextãtē. vnã aũt appellauerũt vnciã casq; ꝑ ordinē talibꝰ designauere figuris q̃ sepissime inueniũt i antiq̃s libris

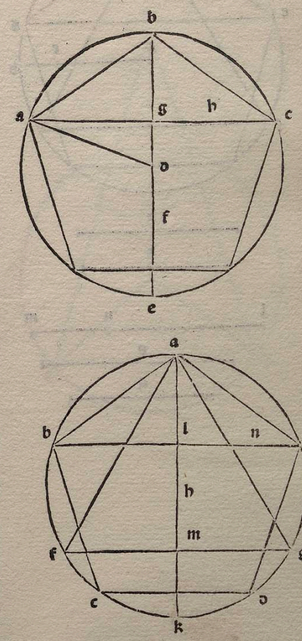
As	Deunx	Dextans	Dodrans	Bisse	Septunx
Semis	Quantunx	Triens	Quadrãs	Sextans	Vncia

¶ Vnciã quoq; quã duodecimã ptē assis fore diximꝰ ī alias rursꝰ.12.fractiões. Sz alia via diuiserũt. nã medietatē vncie dixerũt semivnciã. tertiã vero duellã. quartã siciliciũ. sextã sexculã. octauã dragmã. duodecimã semissiclam. decimãoctauã tremissem. vigesimã quartã scrupulũ. quadragesimã octauã obulũ. septuagesimã secũdã bissiliquã. nonagesimã sextã ceratē. Vltima vero q̃ ē centesima quadragesima q̃rta ps ipius vncie siliquã nominauerũt. his aũt.12.fractionibus vncie posteriores adiunxere calcũ. Est aũt calcus centesima nonagesima scōa ps vncie: cuiꝰ additionis cã fuit vt vsq; ad minimũ extremũ diatesseron ⁊ diapente simphoniaz tonoz semitonorũq; intervallis distinctaz bazz fractionũ denoiatio cõscēderet vl cõtenderet ⁊ ipsas omnes ꝑm ordinē talibus annotauere figuris.

Semiũciã	Duella	Siliqꝰ	Sexcula	Dragma	Emissecla	Tremissis
2	3	4	6	8	12	18

Scrupulus	Obulus	Bissiliqua	Cerates	Siliqua	Calcus
24	48	72	96	144	192

¶ Eius ergo qd dicit: sensꝰ ē: q̃ si in aliquo circulo pentagonꝰ eq̃lateris inscribat illud qd fit ex triꝰ q̃rtis diametri circuli i quinq; sextas linee subtēdētis vnũ ex angulis inscripti pentagoni eq̃le ē pentagono. verbi grã. Sit circlꝰ.a.b.c. sup cētr.d eiq; ex.11.q̃rti inscribat pentagonꝰ equilaterꝰ cuiꝰ duo latera vnũ ex suis angulis ꝓtinētia sint.a.b.⁊.b.c.⁊ angl'o.b.subtendat linea.a.c.⁊ ꝑtrahat diameter.b.d.e secãs lineã.a.c.ꝑ eq̃lia in puncto.g. sitq; d.f.medietas.d.e.⁊.g.b.dupla ad.b.c. eritq; b.f.dodrãs diametri: ē enī tres q̃rte ipsiꝰ ⁊.a.b.erit dextãs vel sextãs.a.c.ē enī.5.sexte eius: ꝑtrahat aũt linea.a.d: dico q̃ illud qd ꝓuenit ex.b.f.in.a.b.ē e/q̃le pētagono inscripto circulo.cũ enī.a.g. sit ꝑpendicularis ad.b.d.erit ex.41.ꝑmi ⁊ illud qd ꝓuenit ex.b.d.in.a.g.duplũ ē ad triangulũ.a.b.d.iõq; qd ꝓuenit ex.b.f.in.a.g.triplũ erit ad eundez triangulũ ⁊ qd ꝓuenit ex.b.f.in.b.g.duplũ ⁊ ex.b.f.in totã.a.b.quinquplũ.cũ itaq; totus pentagonꝰ quintuplꝰ sit ad eũdē trianglin cõstat q̃ istud qd fit ex.b.f.in.a.b.ē eq̃le pentagono ⁊ illud erat demõstrãdũ. Qd igit ex ꝓncipio ꝓpositũ ē nunc alia via sicut ꝑmisimꝰ demõstrem. sint itaq; circulo cuiꝰ centr.b.inscripti pentagonꝰ figure.12.basiũ ⁊ trigonꝰ figure.20.basiuz q̃s eadem spera circũscribit. Constat enī ex.5.hujꝰ q̃ hujꝰ duodecedri pentagonꝰ ⁊ illius ycocedri trigonꝰ ab eodē circulo circũducenī. sitq; pentagonꝰ.a.b.c.d.e. ⁊ trigonus.a.f.g.⁊ angulo.a.pentagoni subtendat linea.b.e.q̃ ex demõstratione.17. tredecimi erit latꝰ cubi quē eadē spera cõcludit: ꝑtrahat itaq; diameter.a.b.k.secans orthogonaliter ⁊ ꝑ equalia vtrãq; duaz lineaz.b.c.⁊.f.g.hãc q̃dē i puncto.l illã vero in pũcto.m. dico q̃ q̃ ꝓportio oiuz supficiez duodecedri ad oēs ycocedri quoz pentagonꝰ ⁊ trigonus ꝓposito circulo sint inscripti ē sicut linee.b.e.que est latus cubi ab eadē spera conclusi ad lineam.f.g.que est latus trigoni ycocedri. constat enim ex corolario octaue tredecimi q̃ linea.b.m.ē dimidiũ linee.a.b. iõq;.a.m.erit dodrans diametri.a.k.ē enī eius tres quarte. sit ergo. l.n.dupla ad. n.e. eritq; .b.n.dextans.b.e.est enī quita eiꝰ sexte.itaq; ꝑ ꝑmissũ ais qd prouenit ex.a.m.in.b.n.erit equale pentagono.a.b.c.d.e.qd autē ꝓuenit ex.a.m.in.m.f.ē equale triangulo.a.f.g. igit ex prima sexti ꝓportio pentagoni ad trigonũ est sicut b.n.ad.m.f. quare duo decupli illius pentagoni ad vigincuplũ istius trigoni sint duodecupli linee.b.n.ad vigincuplum linee.m.f.qd ex.15.quinti ⁊ equa proportionalitate manifestum est duodecuplum autē.b.n.ē tanq̃; decuplum. b.e.nã.12.



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